

Notice of Allowability

Application No.

10/727,637

Examiner

Anthony Mackowey

Applicant(s)

IWAMURA ET AL.

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 18 June 2007.
2. ☒ The allowed claim(s) is/are 8-10,24-26 and 36-41; renumbered 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

The amendment filed 18 June 2007 has been entered and made of record.

Applicant's arguments, see pages 13, filed 18 June 2007, with respect to the rejection of claims 8-11 and 24-27 under 35 U.S.C. 112, first and second paragraphs have been fully considered and are persuasive. The rejection of claims 8-10 and 24-26 has been withdrawn. Claims 11 and 27 have been cancelled.

Applicant's arguments, see page 13, filed 18 June 2007, with respect to the objection to the specification have been fully considered and are persuasive. The objection to the specification has been withdrawn.

Applicant's arguments, see pages 13 and 14, filed 18 June 2007, with respect to the rejection under 35 U.S.C. 101 have been fully considered and are persuasive. Claims 10 and 26 have been amended to recite, "A program, embodied in a computer-readable memory." The rejection under 35 U.S.C. 101 has been withdrawn.

The following is an examiner's statement of reasons for allowance:

Claim 8 recites, "reference calculation means for setting a plurality of reference lines, said reference lines extending in a column direction and being spaced apart by a basic pitch in a row direction, said reference lines including a first reference line located between the first outer shape and the second outer shape, and a second reference line located between the second outer shape and the third outer shape; and control means for controlling at least one of the second and third outer shapes so that a distance between the first reference line and an edge of the second

Art Unit: 2624

outer shape is different from a distance between the second reference line and an edge of the third outer shape in accordance with digital watermark information to be embedded.”

Claim 9 recites, “ a reference calculation step of setting a plurality of reference lines, said reference lines extending in a column direction and being spaced apart by a basic pitch in a row direction, said reference lines including a first reference line located between the first outer shape and the second outer shape, and a second reference line located between the second outer shape and the third outer shape; and a control step of controlling at least one of the second and third outer shapes so that a distance between the first reference line and an edge of the second outer shape is different from a distance between the second reference line and an edge of the third outer shape in accordance with digital watermark information to be embedded.”

Claim 24 recites, “reference calculation means for setting a plurality of reference lines, said reference lines extending in a column direction and being spaced apart by a basic pitch in a row direction, said reference lines including a first reference line located between the first outer shape and the second outer shape, and a second reference line located between the second outer shape and the third outer shape; and extraction means for comparing a first distance, between the first reference line and an edge of the second out shape, to a second distance, between the second reference line and an edge of the third outer shape, and extracting data corresponding to a comparison result of the distances as data embedded using the first and second distances.”

Claim 25 recites, “a reference calculation step of setting a plurality of reference lines, said reference lines extending in a column direction and being spaced apart by a basic pitch in a row direction, said reference lines including a first reference line located between the first outer shape and the second outer shape, and a second reference line located between the second outer

shape and the third outer shape; and an extraction step of comparing a first distance, between the first reference line and an edge of the second out shape, to a second distance, between the second reference line and an edge of the third outer shape, and extracting data corresponding to a comparison result of the distances as data embedded using the first and second distances.”

The above features, as explicitly recited, in combination with the other elements of the claims are neither disclosed nor suggested by the closest prior art of record. United States Patent 6,086,706 to Brassil et al. (cited in Applicant’s IDS filed 29 January 2004) at first glance appears to teach a word shifting technique that would anticipate claims 8 and 24 (Fig. 8; col. 7, lines 46-56). However, the reference lines (vertical lines, 91, 93, 95, 97, 99, 103, 105, 107) shown in the figures are merely for demonstrating the position and a comparison between the shifted and unshifted versions of the text, they are not actually used to embed the information as required by the presently recited claims. Brassil et al. does not disclose or suggest the details of controlling the distance between a reference line and a character in relation to the distance between another reference line and an adjacent character to embed watermark information as required by the claims. That is, the relationship between the two distances embeds the watermark information.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

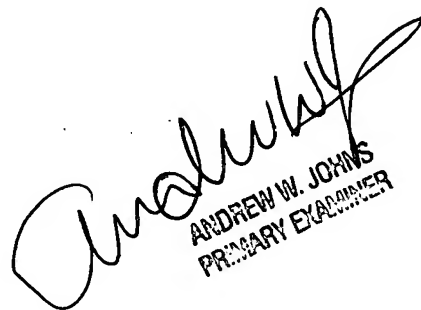
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Mackowey whose telephone number is (571) 272-7425. The examiner can normally be reached on M-F 9:00-6:00.

Art Unit: 2624

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella Matthew can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AM
6/24/2007


ANDREW W. JOHNS
PRIMARY EXAMINER